



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Central Railroad. Great Latin orator, what a disgrace to your immortal name!

Oswego, N. Y.

J. H. WIBBE.

Notes on the Coniferæ of Washington Territory.—The following observations are limited to the eastern slope of the Cascade Mountains, between the parallels of $46^{\circ} 30'$ and $47^{\circ} 30'$ north latitude. It is difficult to give any fixed altitudes for the range of a species, as this is in a great measure regulated by the amount of moisture, these two factors of altitude and moisture combined determining the composition of the forests in the different localities. The damp winds from Puget Sound, after passing over the crest of the mountains, are gradually deprived of their moisture until, at a distance varying from thirty to forty miles from the summit, the soil becomes too dry to support a growth of timber. This line between the forest and sage-brush areas varies in altitude from 1,500 feet, along river valleys, to 3,000 feet. The lowest and perhaps the most extensive, at least the most valuable forests, consist of an open growth of yellow pine (*Pinus ponderosa*, Dougl.) and Douglas spruce or yellow fir (*Pseudotsuga Douglasii*, Carr.), the former extending to an altitude of 4,500 feet, and in dry situations even to 5,000 feet, while the latter ranges somewhat higher. The yellow pine is never found in the denser and damper forests towards the summit, even at as low an elevation as 3,000 feet. The whole timbered area can be well divided into the lower and dry or yellow pine forest, and the upper and damp or fir (*Abies*) forest. The term upper in this sense means proximity to the summit rather than altitude. Probably nine-tenths of the upper area are composed of fir—*Abies grandis*, Lindl., (white fir) first appearing, then becoming mixed with *Abies amabilis*, and finally the first species disappearing and the latter forming the bulk of the forest area at the summit. Another species of fir probably occurs here, *Abies concolor*, Lindl., or perhaps *A. subalpina*, Engelm., but its distribution was not well determined. A few trees of *Abies nobilis*, Lindl., (red fir) were seen near Natches Pass at an elevation of 6,000 feet. *Pinus contorta*, Dougl., var. *Murrayana*, (black pine, tamarac) grows throughout the upper yellow pine area. In this situation it often forms dense thickets, the trees being small and with trunks as straight as arrows. The black pine is also often seen on high exposed summits with *Pinus albicaulis*, the latter ranging higher than any other of the coniferæ of the region, except perhaps *Juniperus communis*, L., var. *alpina*, (juniper) which carpets the alpine peaks. The white pine (*Pinus monticola*, Dougl.) is found scattered throughout the upper yellow pine and lower fir forests, and the beautiful light green foliage of the larch (*Larix occidentalis*, Nutt.) is often a conspicuous object at low elevations. *Picea Engelmanni*, Engelm., (spruce) is often a companion of the fir at high elevations, but is rather local in its distribution. The two hemlocks of the region, *Tsuga Pattoniana* and *Tsuga Mertensiana*, Carr., the latter much resembling the eastern species, *T. Canadensis*, Carr., grow through the upper fir forests. The cylindrical, oblong cones of the former are, after falling, very conspicuous by their reflexed scales. The yellow or Sitka cedar (*Chamocyparis Nutkaensis*, Spach.) is a middle-sized

tree along streams and on lake shores, but on high exposed summits at over 6,500 feet it is hardly more than a shrub, and forms dense thickets. The arbor vitæ, the red cedar of Oregon (*Thuja gigantea*, Nutt.) is the largest tree of the region, some specimens being over ten feet in diameter. The yew (*Taxus brevifolia*, Nutt.) is frequently seen in the dense damp forests, but rarely exceeds a height of 25 feet. Some few specimens of *Juniperus Virginiana*, L., (red cedar) were seen at low elevations. The main summit of the Cascade Range, in the region where the above observations were taken, has an altitude varying from 6,000 to 6,800 feet, and is generally bare of timber. Its immediate slopes are covered with grass and flowers of every hue interspersed with bunches of willows and groves of fir.

Newport, R. I.

FRANK TWEEDY.

Fasciation in Rubus.—A curious case of fasciation was brought to my notice a short time since. The specimen was a cane of the cultivated black-cap raspberry, which, at the extremity, had become strongly flattened and coiled upon itself in the form of a flat spiral. The width of the cane was seven-eighths of an inch, and the thickness about one-third of an inch near the outer circumference of the coil, while on the inner side it was much thinner. The four complete coils were from one and one-half to three and one-half inches across. From the beginning of the first coil the cane bore an unusual number of abortive foliar organs, which increased in number toward the extremity until the entire tip was of a thickened and foliaceous character.

A cross-section of the cane showed it to consist of two regions of entirely different tissue. The thickened portion which followed the periphery of the curve was of normal woody structure, while the opposite side was composed almost entirely of parenchyma. This differentiation of tissues, with their unequal rates of growth, doubtless explains the phenomenon of curving. The coil became more distinct and its radius shorter as the difference between the two regions became more marked, until, at the extremity, the parenchyma predominated and expanded into a sort of flattened membrane. At the time of collection the woody region was still fresh and active, but the parenchyma was dead and withered. This, no doubt, assisted in the curvature, since several transverse fissures across the parenchyma showed that it had been subjected to considerable tension.

I believe the cultivated species of *Rubus* are especially liable to oddities of growth, but I have never seen so striking a departure as this before.

Houghton Farm, Mountainville, N. Y.

W. E. STONE.

Genus Labels.—Mr. H. N. Patterson, of Oquawka, Ill., desires us to state that the first box of his North American genus-labels, from Ranunculaceæ to Compositæ, 650 genera (3 of each), is now ready for delivery. Price \$1.30.

Note.—We send out with this number three plates, which are to be substituted for the badly printed ones that accompanied our March issue.